

26

29 (Added). A debit telephone system comprising:

a plurality of cordless hand-held mobile telephone units, wherein each of said hand-held mobile telephone units includes a processor, memory and internal accounting software,

said internal accounting software including a debit account with a representation of prepaid funds, a plurality of charge rates and a billing algorithm which classifies each telephone call into one of a plurality of billing categories, selects a charge rate corresponding to that billing category, calculates an appropriate charge for that telephone call in real time by using said selected charge rate and subtracts this appropriate charge from said debit account;

B₁

a system provider having a host processor for coordination of mobile phone accounts, wherein said host processor stores mobile telephone unit information including mobile telephone unit identification information, operating codes needed for mobile telephone unit activation and operating codes needed for replenishing mobile telephone unit debit accounts whereby, upon receipt of mobile telephone unit identification information from a particular mobile telephone unit or its user, said host processor ascertains the operating codes needed to activate that particular mobile telephone unit or to replenish its debit account, whereupon said operating codes are communicated to the particular mobile phone unit or its user.

27 30

The debit telephone system of claim 29 wherein said billing categories include billing categories for local calls and long distance calls.

28

31

The debit telephone system of claim 29 wherein said billing categories include billing categories for roaming calls.

29

32

The debit telephone system of claim 29 wherein said billing categories include billing categories for local calls, long distance calls, roaming calls and international calls.

30
33. The debit telephone system of claim 26 wherein said billing categories include billing categories for calls placed within the United States and calls made internationally.

31
34. The debit telephone system of claim 26 wherein the charge rates corresponding to each billing category are different.

32
35. The debit telephone system of claim 26 wherein the charge rates corresponding to different billing categories may be the same.

33
36. The debit telephone system of claim 26 wherein the host processor stored operating codes are communicated to the user by a system provider operator who has access to said host processor.

B, 34
37. The debit telephone system of claim 33 wherein the user enters the operating codes into the mobile telephone unit by manually punching keys on the mobile telephone unit.

35
38. The debit telephone system of claim 26 wherein the host processor stored operating codes are communicated over the airwaves directly from the host processor to the mobile telephone unit.

36
39. The debit telephone system of claim 26 wherein calls are prevented from being made when the debit account has a zero balance.

37
40. The debit telephone system of claim 26 further including a visual display of the debit account balance.

38
41. The debit telephone system of claim 26 wherein said mobile telephone unit further includes a real time clock chip.

39
42. A debit telephone system comprising:

a plurality of cordless hand-held mobile telephone units, wherein each of said hand-held mobile telephone units includes a processor, memory and internal accounting software,

said internal accounting software including a debit account with a representation of prepaid funds, a plurality of charge rates and a billing algorithm which can classify each telephone call into one of a plurality of billing categories including categories for local calls, long distance calls and roaming calls, select a charge rate corresponding to that billing category, calculate an appropriate charge for that telephone call in real time by using said selected charge rate and subtract this appropriate charge from said debit account;

B, a system provider having a host processor for coordination of mobile phone accounts, wherein said host processor stores mobile telephone unit information including mobile telephone unit identification information, operating codes needed for mobile telephone unit activation and operating codes needed for replenishing mobile telephone unit debit accounts whereby, upon receipt of mobile telephone unit identification information from a particular mobile telephone unit or its user, said host processor ascertains the operating codes needed to activate that particular mobile telephone unit or to replenish its debit account, whereupon said operating codes are then communicated to the particular mobile phone unit or its user.

⁴⁰
~~43~~. The debit telephone system of claim ³⁹~~42~~ wherein the host processor generated operating codes are communicated to the user by a system provider operator who has access to said host processor.

⁴¹
~~44~~. The debit telephone system of claim ⁴⁰~~43~~ wherein the user enters the operating codes into the mobile phone unit by manually punching keys on the mobile phone unit.

⁴²
45. The debit telephone system of claim ³⁹~~42~~ wherein the host processor stored operating codes are communicated over the airwaves directly from the host processor to the mobile telephone unit.

⁴²
46. The debit telephone system of claim ³⁹~~42~~ wherein calls will be prevented from being made when the debit account has a zero balance.

⁴⁴
47. The debit telephone system of claim ³⁹~~42~~ further including a visual display of the debit account balance.

B,
⁴⁵
48. A debit telephone system comprising:
a plurality of cordless hand-held mobile telephone units, wherein each of said hand-held mobile telephone units includes a processor, memory and internal accounting software,

said internal accounting software including a debit account with a representation of prepaid funds, a plurality of charge rates and a billing algorithm which can classify each telephone call into one of a plurality of billing categories, select a charge rate corresponding to that billing category, calculate an appropriate charge for that telephone call in real time by using said selected charge rate and subtract this appropriate charge from said debit account;

a system provider having a host processor for coordination of mobile phone accounts, said host processor stores mobile telephone unit information including mobile telephone unit identification information, assignable telephone numbers, operating codes needed for mobile telephone unit activation and operating codes needed for replenishing mobile telephone unit debit accounts whereby, upon receipt of mobile telephone unit identification information from a particular mobile telephone unit or its user and, at the time of activation, information identifying the user's locale, said host processor ascertains the operating codes

needed to activate that particular mobile telephone unit or to replenish its debit account and, at the time of activation, ascertains an assignable telephone number which corresponds to the mobile telephone user's locale, whereupon said operating codes and assignable telephone number are communicated to the particular mobile phone unit or its user.

46
49.

A debit telephone system comprising:

a plurality of cordless hand-held mobile telephone units, wherein each of said hand-held mobile telephone units includes a processor, memory and internal accounting software,

B, said internal accounting software including a debit account with a representation of prepaid funds, a plurality of charge rates and a billing algorithm which can classify each telephone call into one of a plurality of billing categories including categories for local, long distance and roaming telephone calls, select a charge rate corresponding to that billing category, calculate an appropriate charge for that telephone call in real time by using said selected charge rate and subtract this appropriate charge from said debit account;

a system provider having a host processor for coordination of mobile phone accounts, said host processor stores mobile telephone unit information including mobile telephone unit identification information, assignable telephone numbers, operating codes needed for mobile telephone unit activation and operating codes needed for replenishing mobile telephone unit debit accounts whereby, upon receipt of mobile telephone unit identification information from a particular mobile telephone unit or its user and, at the time of activation, information identifying the user's locale, said host processor ascertains the operating codes needed to activate that particular mobile telephone unit or to replenish its debit account and, at the time of activation, ascertains an assignable telephone number which corresponds to the

mobile telephone user's locale, whereupon said operating codes and assignable telephone number are then communicated to the particular mobile phone unit or its user.

50. Software for a debit telephone system comprising:

B, internal accounting software for a cordless hand-held mobile telephone unit to establish a debit account with a representation of prepaid funds, store a plurality of charge rates and create a billing algorithm which can classify each telephone call into one of a plurality of billing categories, select a charge rate corresponding to that billing category, calculate an appropriate charge for that telephone call in real time by using said selected charge rate and subtract this appropriate charge from said debit account; and

software for a system provider's host processor which stores mobile telephone unit identification information, stores operating codes needed for mobile phone unit activation and stores operating codes needed for replenishing mobile phone unit debit accounts whereby, upon receipt of mobile telephone unit identification information from a particular mobile phone unit or its user, said host processor software is capable of ascertaining the operating codes needed to activate that particular mobile phone unit or to replenish its debit account.

51. The debit telephone system software of claim 50 wherein the internal accounting software for said cordless handheld mobile telephone can ascertain whether a telephone call being dialed belongs to a long distance call category.

52. The debit telephone system software of claim 50 wherein the internal accounting software for said cordless handheld mobile telephone can ascertain whether a telephone call being dialed belongs to a local call category.

7

53. The debit telephone system software of claim 50 wherein the internal accounting software for said cordless handheld mobile telephone can ascertain whether a telephone call being dialed belongs to a roaming call category.

54. The debit telephone system software of claim 50 wherein the internal accounting software for said cordless handheld mobile telephone can ascertain whether a telephone call being dialed belongs to a international call category.

55. The debit telephone system software of claim 50 wherein the internal accounting software for said cordless handheld mobile telephone will prevent further telephone calls from being made if there are no remaining funds in the debit account.

B,
56. Software for a debit telephone system comprising:

internal accounting software for a cordless hand-held mobile telephone unit to establish a debit account with a representation of prepaid funds, store a plurality of charge rates and create a billing algorithm which can classify each telephone call into one of a plurality of billing categories including categories for local, long distance and roaming telephone calls, select a charge rate corresponding to that billing category, calculate an appropriate charge for that telephone call in real time by using said selected charge rate and subtract this appropriate charge from said debit account; and

software for a system provider's host processor which stores mobile telephone unit identification information, stores assignable telephone numbers, stores operating codes needed for mobile phone unit activation and stores operating codes needed for replenishing mobile phone unit debit accounts whereby, upon receipt of mobile phone unit identification information from a particular mobile phone unit or its user, said host processor software is capable of ascertaining the operating codes needed to activate that particular mobile

phone unit, to replenish its debit account or to select an assignable telephone number corresponding to the user's locale.

57. A mobile debit telephone unit operating within a debit telephone system comprising:

3, a transmitter, a receiver, a processor, memory and internal accounting software, wherein said internal accounting software includes a debit account with a representation of prepaid funds, a plurality of charge rates, memory allocation for a phone number to be assigned at the time of activation and a billing algorithm which can classify each telephone call into one of a plurality of billing categories, select a charge rate corresponding to that billing category, calculate an appropriate charge for that telephone call in real time by using said selected charge rate and subtract this appropriate charge from said debit account.

58. The mobile debit telephone unit of claim 57 wherein said internal accounting software prevents calls from being made when the debit account has a zero balance.

59. The mobile debit telephone of claim 57 wherein said internal accounting software has the ability to accept and implement operating codes generated by a system provider host processor.

60. The mobile debit telephone of claim 57 wherein said billing categories include billing categories for local calls, long distance calls and roaming calls.

61. A mobile debit telephone unit operating within a debit telephone system comprising:

12, a transmitter, a receiver, a processor, memory and internal accounting software, wherein said internal accounting software includes a debit account with a representation of prepaid funds, a plurality of charge rates, memory allocation for a phone number to be assigned

at the time of activation, coding to allow the telephone unit to accept and implement operating codes generated by a system provider host processor and a billing algorithm which can classify each telephone call into one of a plurality of billing categories including billing categories for local calls, long distance calls and roaming calls, select a charge rate corresponding to that billing category, calculate an appropriate charge for that telephone call in real time by using said selected charge rate and subtract this appropriate charge from said debit account.

62. The mobile debit telephone of claim 61 wherein said operating codes are encrypted.

B, 63. A method for activating a mobile debit telephone unit within a debit telephone system run by a system provider comprising:

storing mobile debit telephone identification information, mobile debit telephone operating codes and assignable telephone numbers in a system provider's host processor;

having the mobile debit telephone or its user initiate communication with the system provider to activate said mobile debit telephone unit including providing to said system provider with information about the identity of said mobile debit telephone unit and the location of its user;

inputting said identity and location information into the system provider's host processor;

retrieving from said system provider's host processor operating codes to activate said debit telephone, operating codes to establish a debit account balance and an assignable telephone number corresponding to the user location information;

communicating said operating codes and assignable telephone number to said mobile telephone unit or its user

inputting said operating codes and assignable telephone number into said mobile debit telephone unit to activate said mobile debit telephone unit, establish a debit account balance and establish a working telephone number for said mobile debit telephone unit.

64. The activation method of claim 63 wherein the host processor stored operating codes and assignable telephone number are communicated to the user by a system provider operator who has access to said host processor.

65. The activation method of claim 64 wherein the user enters the operating codes into the mobile debit telephone unit by manually punching keys on the mobile debit telephone unit.

66. The activation method of claim 63 wherein the host processor stored operating codes are communicated over the airwaves directly from the host processor to the mobile debit telephone unit.

67. The activation method of claim 63 wherein said operating codes are communicated to said mobile debit telephone unit or its user in encrypted form.

68. The activation method of claim 63 wherein said mobile debit telephone unit identity information includes the telephone's electronic serial number.

69. The activation method of claim 63 further comprising having the host processor use the location information provided by the user to select home SIDs for the mobile debit telephone unit and those communicate those home SIDs to the mobile debit telephone unit or its user to allow the mobile debit telephone unit to determine whether it is roaming.

70. A method for replenishing a mobile debit telephone unit debit account within a debit telephone system run by a system provider comprising:

storing operating codes within a system provider's host processor which are capable of replenishing a mobile telephone unit's debit account;

having the mobile debit telephone user pay to have the mobile telephone unit debit account replenished in a designated amount and providing said user with verification of such payment;

having the mobile debit telephone or its user initiate communication with the system provider to replenish the mobile telephone unit debit account including providing to said system provider information about the identity of said mobile debit telephone unit and verification of payment;

b, inputting said identity and payment verification information into the system provider's host processor;

retrieving from said system provider's host processor operating codes applicable only to the particular mobile debit telephone unit identified in order to replenish that telephone's debit account in the designated amount;

communicating said operating codes to said mobile telephone unit or its user; and,

inputting said operating codes into said mobile debit telephone unit to replenish its debit account.

71. The debit account replenishment method of claim 70 wherein the host processor stored operating codes are communicated to the user by a system provider operator who has access to said host processor.

72. The debit account replenishment method of claim 71 wherein the user enters the operating codes into the mobile debit telephone unit by manually punching keys on the mobile telephone unit.

73. The debit account replenishment method of claim 70 wherein the host processor stored operating codes are communicated over the airwaves directly from the host processor to the mobile debit telephone unit.

74. The debit account replenishment method of claim 70 wherein said operating codes are communicated to said mobile telephone unit or its user in encrypted form.

75. The debit account replenishment method of claim 70 wherein said mobile debit telephone unit identity information includes the telephone's electronic serial number
